

REMARKS

1. Claim Rejections – 35 U.S.C. 102(e)

Claims 1, 5 – 8, 10 – 15, 17, 19 and 20 were rejected under 35 U.S.C. 102(e) as being anticipated by Aimoto.

5 **Response**

Claim 1

10 The applicant respectfully disagrees that the claimed limitation, “a counter for monitoring **the number of descriptors in a first state** to produce a count value” is anticipated by Aimoto. Aimoto monitors a length of transmission data CNT(p) of a subset of buffers and compares this value with a bandwidth of the subset of buffers, “the packet read-out circuit 81 compares the value of CNT(p) of the counter 63 with the value of BW(p) of the bandwidth 62” [Col.10, lines 42 – 44]. The CNT(p) of the subset of buffers is a continuous value and therefore cannot be divided into first and second states. Claim 1 (as supported by the specification) denotes an occupied (unavailable) or empty (available) 15 buffer as first and second states, respectively (or vice versa). Therefore, this count value is a discrete parameter, which is different from the continuous CNT(p) parameter. Moreover, the number of descriptors is a subset of the number of data buffers. In other words, the number of the descriptors is fewer than that of data buffers [Para 0004] in the original specification]. Therefore, the number of the descriptors in a first state is different from the 20 length of transmission data of a subset of buffers. Furthermore, the claimed count value has direct correlation to the number of buffers within a subset, whereas CNT(p) taught by Aimoto is a **total** value of a subset of buffers. As the count value taught by Aimoto cannot have states and is continuous, the applicant asserts that Aimoto fails to read on the limitation, “a counter for monitoring **the number of descriptors in a first state** to

produce a count value". In other words, Aimoto's packet read-out circuit (reference numeral 81, FIG. 1) as cited by the Examiner is operated according to values recorded in the management table (reference numeral 60, FIG. 7), which fails to anticipate claimed limitations directed to the counter in Claim 1.

- 5 Furthermore, Aimoto fails to teach the plurality of descriptors corresponding to a subset of the plurality of data buffers. As the plurality of descriptors generate the count value by being in a first state or a second state, the applicant asserts that a total bandwidth of a subset of buffers cannot be utilized to read on this limitation. Furthermore, it should be noted that the claimed descriptors only correspond to a subset of data buffers, whereas
- 10 Aimoto teaches separating buffers into a plurality of subsets, and therefore CNT(p) cannot be considered to only correspond to a single subset.

For these reasons, the applicant asserts that Claim 1 should be found allowable over the prior art.

Claim 5

- 15 As detailed above, the count value taught by Aimoto corresponds to a total used bandwidth of a subset of buffers. Claim 5 teaches that the count value corresponds to a number of descriptors in a first state being an unavailable state. As detailed above, Aimoto fails to teach the descriptors. Furthermore, Aimoto fails to teach that the count value is a discrete value able to have states, and for these reasons the applicant asserts that
- 20 Claim 5 should be found allowable. Furthermore, Claim 5 is dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claim 6

The threshold value taught by Aimoto is a maximum bandwidth of a subset of buffers. Therefore the applicant contends that this threshold value is a physical capacity

of the buffers and therefore cannot be programmed. The applicant therefore asserts that Claim 6 should be found allowable. Furthermore, Claim 6 is dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claim 7

5 Claim 7 contains substantially the same limitation as Claim 5, except that the first state corresponds to a free state in Claim 7. For the reasons detailed in the response to Claim 5, the applicant asserts that Claim 7 should also be found allowable. Furthermore, Claim 7 is dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

10 Claims 8 and 10

Claims 8 and 10 are dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claim 11

15 Claim 11 is a method claim detailing substantially the same limitations as Claim 1. With respect to the arguments in the response to Claim 1, the applicant asserts that Claim 11 should also be found allowable, as Aimoto fails to teach the limitations of a plurality of descriptors that corresponds to a subset of the data buffers, monitoring an amount of the descriptors in a first state and generating a first event to the host system according to the comparison signal to prevent all the descriptors from being in the first state.

20 Claims 12 – 14

Claims 12 – 14 contain the same limitations as claims 5 – 7, respectively. The applicant therefore asserts that claims 12 – 14 should be found allowable for the same reasons as detailed, respectively, in the responses to claims 5 – 7. Furthermore, claims

12 – 14 are dependent on Claim 11. As the applicant believes Claim 11 has been placed in a position for allowance, claims 12 – 14 should also be found allowable.

Claim 15

5 The applicant asserts that the step of comparing CNT(p) with bandwidth as taught by Aimoto does not teach determining if a data packet is an ok packet. The step merely determines whether bandwidth is sufficient to store data, regardless of whether the stored data is ok or has errors. Therefore, the applicant asserts that Claim 15 should be found allowable. Furthermore, Claim 15 is dependent on Claim 11 and should be found allowable if Claim 11 is found allowable.

10 Claim 17

For the same reasons as detailed in the response to Claim 15, the applicant believes that Claim 17 should also be found allowable. Furthermore, Claim 17 is dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claims 19 – 20

15 Claims 19 – 20 are dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

2. Claim Rejections – 35 U.S.C. 103(a)

Claims 2 and 3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Aimoto in view of Tsujimoto.

20 Response

Claims 2 and 3 are dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claims 4, 9, 16 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Aimoto in view of Kataria.

Response

5 Claim 4

Aimoto explicitly teaches that the comparison of the count value to the threshold value either results in altering the count value (Col.10, lines 45 – 47) or results in reading out a **single** packet from the subset of buffers (Col.10, lines 52 – 54). The applicant therefore contends that it is illogical to implement the teachings of Kataria in Aimoto. The
10 utilization of bandwidth considerations means that not all buffers need to be cleared when the threshold value is exceeded. Furthermore, Claim 4 is dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claim 9

For similar reasons as detailed in the response to Claim 4, the applicant asserts that
15 Claim 9 should also be found allowable. Furthermore, Claim 9 is dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claim 16

For similar reasons as detailed in the response to Claim 4, the applicant asserts that Claim 16 should also be found allowable. Furthermore, Claim 16 is dependent on Claim
20 11 and should be found allowable if Claim 11 is found allowable.

Claim 18

Claim 18 contains similar limitations to Claim 11 and Claim 16. For the reasons detailed in the respective responses to claims 11 and 16, the applicant believes that Claim 18 should be found allowable over the prior art.

Conclusion:

Thus, all pending claims are submitted to be in condition for allowance with respect to the cited art for at least the reasons presented above. The Examiner is encouraged to telephone the undersigned if there are informalities that can be resolved in a phone
5 conversation, or if the Examiner has any ideas or suggestions for further advancing the prosecution of this case.

Sincerely yours,

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)

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